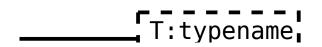
-m_dataPtr: T*
-m_rowSize: int
-m_numRows: int

UpperMatrix

```
ename
```

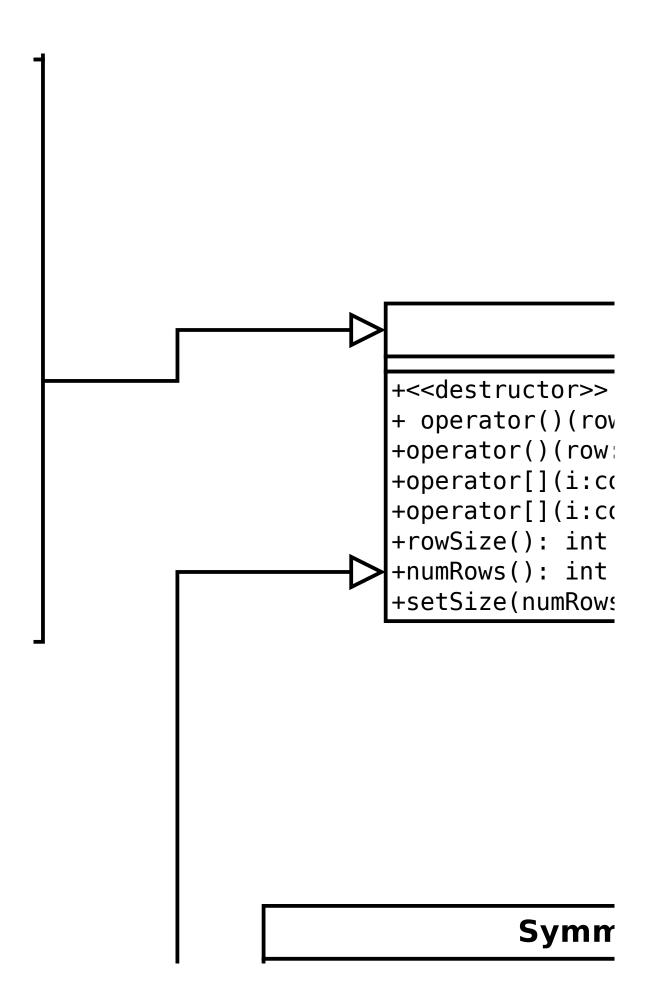


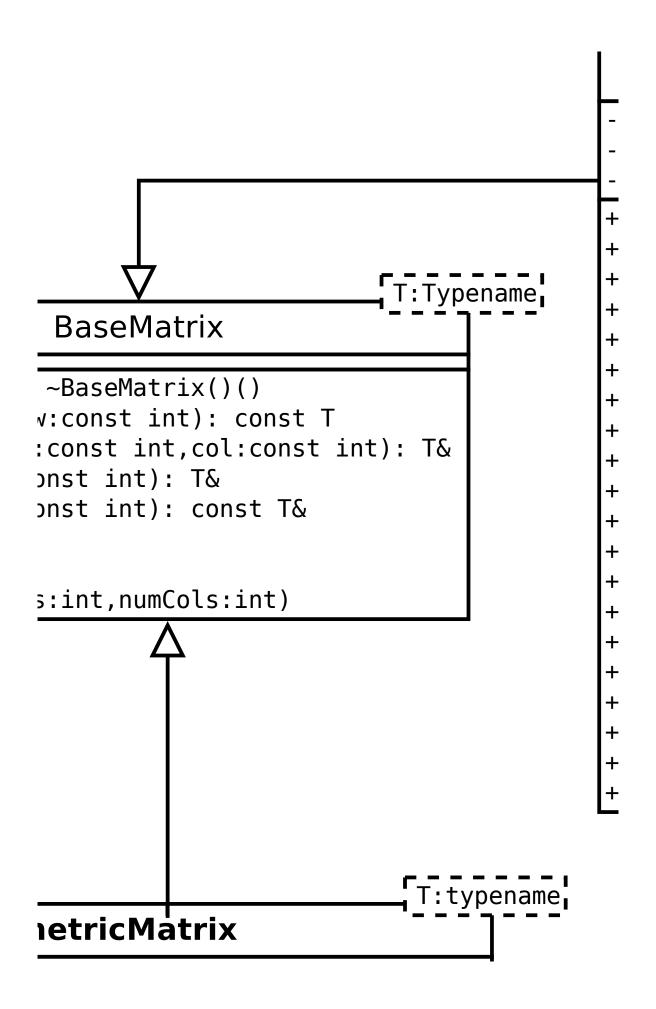




```
+UpperMatrix()
+UpperMatrix(nu
+UpperMatrix(ma
+~UpperMatrix()
+operator()(rov
+operator()(rov
+operator+(rhs:
+operator-(rhs:
+operator-():
+operator*(rhs:
+operator*(rhs:
+operator*(rhs:
+operator[](i:
+operator[](i:c
+rowSize():
+numRows(():
+setSize(numRov
+actualSize():
+theoSize(): ir
        Lower
```

```
_mRows:int,numCols:int)
atrix:UpperMatrix<T>&)
v:const int,col:const int): const T
v:const int,col:const int): T&
:const BaseMatrix<T>&): ParamMatrix<T>
:const BaseMatrix<T>&): ParamMatrix<T>
JpperMatrix<T>
:const BaseMatrix<T>&): ParamMatrix<T>
:const T): UpperMatrix<T>
:const LinearVector<T>&): ParamMatrix<T>
const int): T&
const int): const T&
١t
vs:int,numCols:int)
int
١t
      «LinearVector»
                        T:typename
rMatrix
```





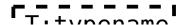
ParamMatrix

```
m dataPtr: T*
m rowSize:
          int
m numRows: int
ParamMatrix()
ParamMatrix(numRows:int,numCols:int)
ParamMatrix(matrix:const ParamMatrix<T>&
ParamMatrix((matrix:const BaseMatrix<T>&
~ParamMatrix()
operator()(row:const int,col:const int):
operator()(row:const int,col:const int):
operator+(rhs:const BaseMatrix<T>&): Par
operator-(rhs:const BaseMatrix<T>&): Par
operator-(): ParamMatrix<T>
operator*(rhs:const BaseMatrix<T>&): Par
operator*(rhs:const T): ParamMatrix<T>
operator*(rhs:const LinearVector<T>&): P
operator[](i:const int): T&
operator[](i:const int): const T&
rowSize(): int
numRows((): int
setSize(numRows:int,numCols:int)
getSize(): int
transpose(): ParamMatrix<T>
```

```
const T
T&
amMatrix<T>
amMatrix<T>
amMatrix<T>
aramMatrix<T>
```

«All Matrice:

s and LinearVector»

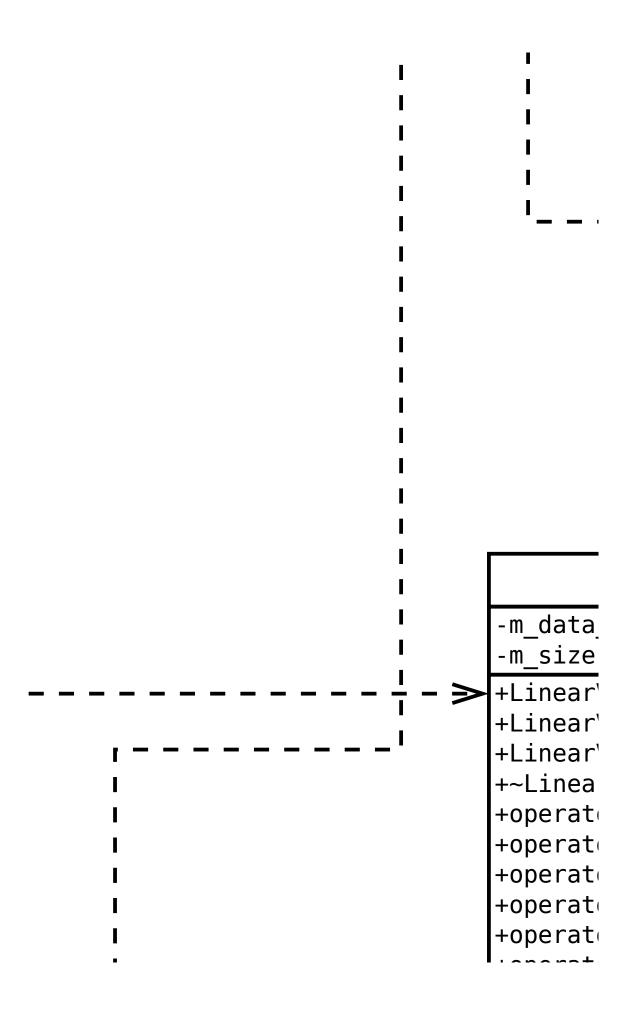


```
-m dataPtr: T*
-m rowSize:
            int
-m numRows:
            int
+LowerMatrix()
+LowerMatrix(numRows:int,nu
+LowerMatrix(mstrix:const L
+LowerMatrix(matrix:const F
+LowerMatrix(matrix:const §
+~LowerMatrix()
+operator()(row:const int,c
+operator()(row:const int,c
+operator+(rhs:const BaseMa
+operator-(rhs:const BaseMa
+operator-(): LowerMatrix<1
+operator*(rhs:const BaseMa
+operator*(rhs:const T): Lc
+operator*(rhs:const Linear
+operator[](i:const int): ]
+operator[](i:const int): c
+rowSize(): int
+numRows((): int
+setSize((numRows:int,numCc
+actualSize(): int
+theoSize(): int
+transpose(): UpperMatrix<1
```

```
imCols:int)
_owerMatrix<T>&)
'aramMatrix<T>& )
SymmetricMatrix<T>&)
col:const int): const T
:ol:const int): T&
itrix<T>&): ParamMatrix<T>
itrix<T>&): ParamMatrix<T>
_>
itrix<T>&): ParamMatrix<T>
>werMatrix<T>
'Vector<T>&): ParamMatrix<T>
-&
const T&
>ls:int)
```

```
-m dataPtr: T*
-m rowSize: int
-m numRows: int
+SymmetricMatrix()
+SymmetricMatrix(numRows
+SymmetricMatrix(matrix:
+SymmetricMatrix(matrix:
+~SymmetricMatrix()
+operator()(row:const in
+operator()(row:const in
+operator+(rhs:const Bas
+operator-(rhs:const Bas
+operator-(): SymmetricM
+operator*(rhs:const Bas
+operator*(rhs:const T):
+operator*(rhs:const Lin
+operator[](i:const int)
+operator[](i:const int)
+rowSize(): int
+numRows((): int
+setSize(numRows:int,num
+actualSize(): int
+theoSize(): int
```

```
:int,numCols:int)
SymmetricMatrix<T>&)
const ParamMatrix<T>&)
t,col:const int): const T
t,col:const int): T&
eMatrix<T>&): ParamMatrix<T>
eMatrix<T>&): ParamMatrix<T>
|atrix<T>
eMatrix<T>&): ParamMatrix<T>
 SymmetricMatrix<T>
earVector<T>&): ParamMatrix<T>
: T&
: const T&
Cols:int)
```



LinearVector

```
_ptr: T*
: int

Vector(n:int)
Vector()
Vector(vect:const LinearVector<T>&)
rVector()
or[](i:const int): T&
or[](i:const int): const T&
or+(rhs:const LinearVector<T>&): LinearVector-(rhs:const LinearVector<T>): LinearVector-(): LinearVector<T>
```

GlobalFur

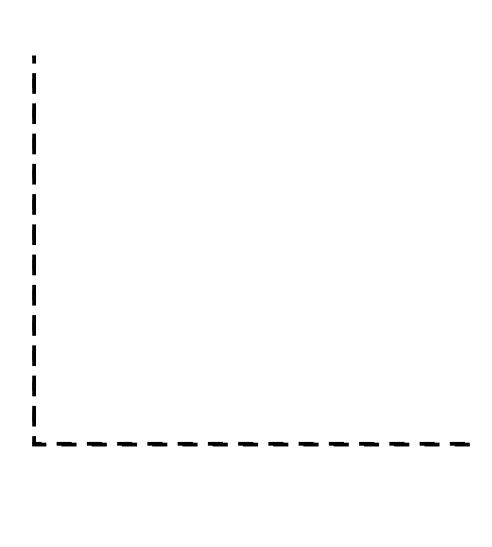
```
+operator<<(stream:ostream&,matrix:c
+operator>>(stream:ifstream&,rhs:Par
+operator<<(stream:ostream&,rhs:Line
+operator>>(stream:istream&,rhs:Line
+operator>>(stream:ifstream&,rhs:Lir
+operator<<(stream:ostream&,matrix:c
+operator>>(stream:ostream&,matrix:c
+operator<>(stream:ostream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ostream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>(stream:ifstream&,matrix:c
+operator>>)
```

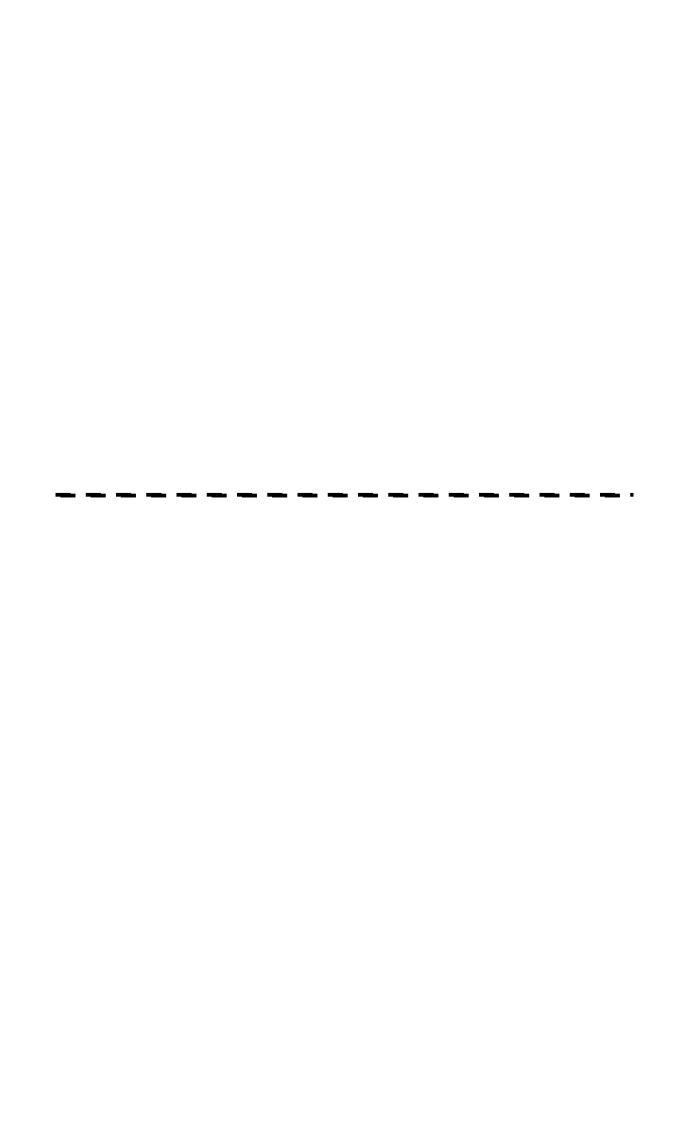
```
ector<T>
ctor<T>
```

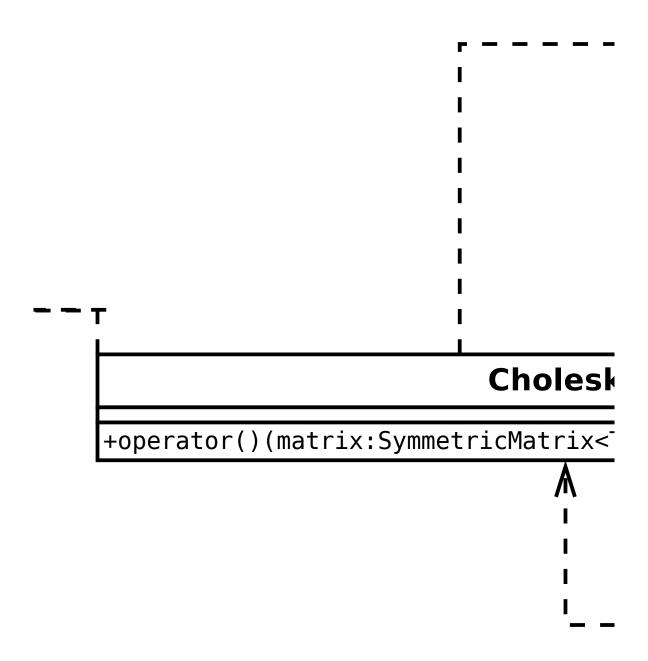
ı i Lypename

nctions

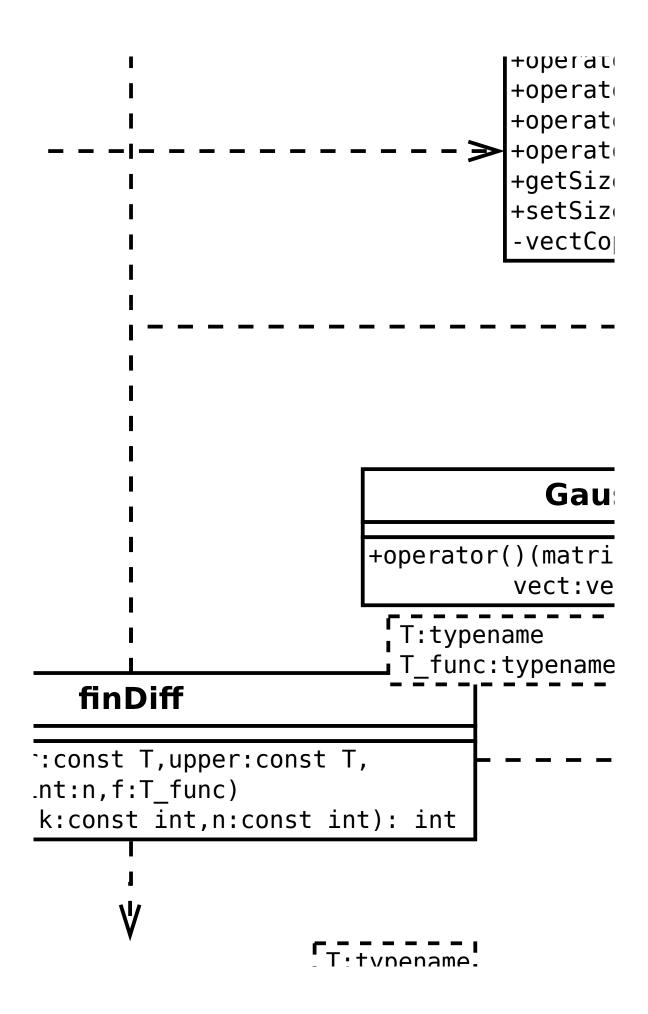
```
const ParamMatrix<T>&): ostream&
ramMatrix<T>&): ifstream&
st LinearVector<T>&): ostream&
earVector<T>&): istream&
nearVector<T>&): ifstream&
const UpperMatrix<T>&): ostream&
UpperMatrix<T>&): ostream&
const LowerMatrix<T>&): ostream&
const LowerMatrix<T>&): ostream&
SymmetricMatrix<T>&): ifstream&
SymmetricMatrix<T>&): ifstream&
```







```
T:typename
(y
Γ>&, vector: Linear Vector < T>&)
                          +operator()(lower
                                     const i
                          +map(j:const int,
```



```
or~(rns:const Linearvector<i><):
or*(rhs:const T): LinearVector<T>
or=(rhs:const LinearVector<T>&): LinearVe
or=(rhs:const T): LinearVector<T>&
e(): int
e(n:int)
py(vect:const LinearVector<T>&)
                    T:typename
ssianSolver
x:ParamMatrix<T>& matrix,
ctor<LinearVector<T> >)
```

ector<T>&